# City of Newton Wastewater System Performance Annual Report for 2002

January 30, 2003

### I. General Information

Facility Name: City of Newton, Clark Creek Wastewater Treatment Plant

Responsible Entity: Martin D. Wilson, Director of Public Works & Utilities

PO Box 550

Newton, NC 28658 **828-695-4310** 

Applicable Permits: National Pollutant Discharge Elimination System (NPDES) Permit

Number - NC0036196

Land Application (Non-Discharge) Permit Number - WQ0003902

The City of Newton Public Works and Utilities Department views environmental protection as one of its top priorities. For this reason, the City actively participates in the collection, treatment and disposition of sewage generated within its boundaries.

Wastewater (sewage), discharged by customers, flows to the city owned and operated Clark Creek Wastewater Treatment Plant through a sanitary sewer system encompassing approximately 114 miles of sewer lines; four pump stations and a series of force mains. Upon arrival at the treatment plant all wastewater is treated and discharged in an environmentally safe manner in accordance with National Pollutant Discharge Elimination System (NPDES) regulations.

Clark Creek Wastewater Treatment Plant, completed in 1979 and upgraded in 1992, has the capacity to treat 7.5 million gallons of wastewater per day (MGD). The plant currently operates well below its permitted flow rate, averaging 3.51 MGD for 2002. To ensure compliance with all Federal and State laws regarding the safe treatment of wastewater, the City of Newton appropriates more than two million dollars (\$2,000,000.00) per year towards operating and maintaining its wastewater system. The City of Newton Wastewater Treatment Plant did not have any Monitoring/Reporting violations for the year 2002. One sampling event in December indicated that the effluent exceeded the toxicity standard. Further analysis was being conducted to determine the validity of the test results.

## II. Performance

*Yearly Performance:* 

In 2002, the City of Newton effectively treated one billion, two hundred and eighty-two million (1,282,000,000) gallons of wastewater. During this time the City of Newton wastewater collection system experienced three (3) overflows reaching surface water with less than 0.0006% overflow into surface waters of the total amount treated. No overflow resulted in a fish kill or other negative environmental impact.

#### Monthly Performance:

In 2002, the City of Newton wastewater collection system experienced a total of three (3) reportable Sanitary Sewer Overflows (SSO). All three overflows reached surface water or a waterway. The City reported all SSOs reaching surface water or a waterway to the Mooresville Office of the N.C. Department of Environment and Natural Resources, Division of Water Quality in accordance with the City's Sanitary Sewer Overflow Policy and state law. A monthly account of all SSOs that discharged into surface waters is summarized below:

Month	# SSO	Location	Volume/month, gal.**	Cause
January	1*	1400 block of Hwy 10 West	6000	Inflow from rain
				event
July	1*	Between West 11 <sup>th</sup> and West 12th	< 500	Grease Blockage
December	1*	246 Oakland Circle	< 500	Debris in line

<sup>\*</sup>SSOs reaching waterway; \*\* Total gallons reaching waterway for month

Homes, businesses, and industries discharge their wastewater (sewage) into the sanitary sewer system. Once the wastewater is discharged into the pipes it travels through the collection system until it reaches the Wastewater Treatment Plant. The system is composed of a complicated network of pumps, manholes, standby generators and over five hundred thousand (600,000) feet of pipe. The Wastewater Treatment Plant is staffed and operated 24 hours per day, 365 days a year. City of Newton Public Works and Utilities staff includes 14 State Certified Operators, including five employees that hold the highest certification obtainable in North Carolina for Wastewater Treatment Operators. The Environmental Protection Agency has recognized the Clark Creek WWTP for Operation and Maintenance Excellence.

In March 2000, City of Newton staff with the help of engineering firm Arcadis, Geraghty and Miller began conducting an extensive audit of their Management, Operation and Maintenance (M.O.M.) practices regarding wastewater treatment in cooperation with Region 4 of the United States Environmental Protection Agency. The audit was a voluntary effort aimed at accomplishing the following goals:

- Demonstrate the effectiveness of the City of Newton's current M.O.M. policies, practices and procedures.
- Evaluate the City of Newton's current M.O.M. policies, practices and procedures to ensure promotion of efficient and effective wastewater collection and treatment services at reasonable cost to customers.
- Ensure the City of Newton's current M.O.M. policies, practices and procedures protect public health and water quality by minimizing the potential for sewer overflows and by controlling as quickly as possible any unavoidable overflows.
- Identify strategies to improve the City of Newton's current M.O.M. policies, practices and procedures.

The M.O.M. audit is complete and has been sent to EPA Region 4 for review and comments. The City has not received comments from EPA Region 4 as of this date.

## III. Notification

The City will notify the users of the wastewater system of this report by way of the City Newsletter, the City Web-site, and by announcement at a City of Newton Board of Aldermen meeting.

### **IV.** General Information

The City of Newton is responsible for maintaining unobstructed wastewater flow in the City owned sewer system. The line that connects a house or building to the City sewer system is called a service lateral. The property owner is responsible for maintaining the service lateral. If a blockage occurs causing a sewer backup, the city encourages residents to call the city so a crew can verify which part of the line is obstructed. A city crew will check the main line and clear the line if necessary. If the main line is clear, the property owner will be notified of the need to call a plumber to clear the service lateral. Occasionally there are blockages in service laterals that extend into the utility right-of-way. When this occurs the City will check and clean the line to the "clean out" if requested. However, the property owner is ultimately responsible for the entire length of the service lateral.

#### Why do sewer lines block?

Many things can become lodged in a sewer line causing a backup; e.g. sticks, rocks, bricks, pieces of broken pipe, string, rags, **GREASE**, paper towels, newspapers, sanitary napkins, plastics, etc. Many blockages occur as a result of tree roots growing into sewer pipes. Roots collect grease and animal fat poured down drains. Over time, this collection of debris can cause an obstruction. You can help prevent sewer backups in your home and protect the environment if you adhere the following advice: (1) Never flush or put anything down a toilet or drain that would clog a sewer line, (2) do not wash grease down a drain and (3) report any sewer overflow immediately.

It is a good idea to collect grease in a can or jar and put it in the refrigerator. When the container is full, and it solidifies, dispose of it with the household garbage.

#### **Questions?**

Should you have any questions regarding the treatment of wastewater in your community or need to report a sewer problem, please feel free to call the City of Newton Public Works and Utilities Department at 828 695-4310. To report a sewer problem after 5:00 PM or on weekends call 695-4306.